**Africa RISING – How will we know we have been successful?**

**Overview**

Africa RISING is a research for development program designed to pilot potential interventions for the sustainable intensification of mixed crop-tree-livestock systems and provide data and information that will lead to the better design of development projects. It comprises three linked projects (West Africa, East & Southern Africa and Ethiopian Highlands) with a separate Monitoring, Evaluation and Impact Assessment Component. The primary hypothesis of the Africa RISING Program is that sustainable intensification of mixed crop-tree-livestock systems leads to increased whole farm productivity, which in turn leads to development outcomes (improved welfare) such as improved livelihoods (income, assets, capacity etc.) and better food and nutrition security for those who depend on these systems. It is further hypothesised that a combination of relevant interventions is more likely to increase whole farm productivity than single interventions.

The hypotheses will be tested by implementing baskets of interventions in selected communities[[1]](#footnote-1). Within a community interventions will be ‘offered’ to volunteers. These interventions will vary between projects, between communities and even within communities, depending on the circumstances of each household – the interventions on any farm will be the choice of the individual household. The types of intervention will be informed by a farm/household typology which will classify farms/households which are ‘sufficiently similar’ that the expected effects may be similar and which will allow extrapolation to other similar farms/households. The target communities have been selected to be representative of other communities in the same ‘development domain’. The ‘development domain’ refers to the original IFPRI designation from the site selection process, which takes into account locally relevant market, biophysical, and demographic indicators and is therefore defined in a country-specific context. In addition to the interventions on the target farms, the project will put in place mechanism to facilitate extension of the interventions to other farms in the community, but these other farms will not be subject to the same degree of study.

The farming systems analysis and modelling will be used to help identify and target appropriate interventions for different farm types in a typology and to perform ex-ante impact analysis.

**Measuring success (or failure)**

To assess program success, or otherwise, the following information/evidence needs to be generated at the specified scales.

1) What are the processes (technical, social, institutional) by which Africa RISING is improving farm productivity?

*Relevant scale:* the household/farm scale.

*Who is responsible for providing evidence:* led by the regional/country project research teams, using a variety of agronomic, systems, participatory action research and other approaches.

2) What are the implications of these productivity-enhancing processes for environmental, social, economic sustainability?

*Relevant scale:* the household/farm scale, with some NRM implications at the landscape level.

*Who is responsible?* Led by the regional/country research teams, using a variety of agronomic, participatory systems analysis, modelling, systems, and other approaches.

3) What are the impacts of these productivity-enhancing processes on development outcomes, at a variety of scales?

*Household/farm livelihoods scale:*

* What effect has Africa RISING had on farm practice and welfare of the intervention households?
* led by IFPRI, with input from the regional/country research teams
* employs a variety of agronomic, systems, and other approaches, including IFPRI survey
* Sampling frame: all households, as selected by the regional/country project research teams

*Community scale*

* What effect has the project had on other households in the community, such as non-target households, input suppliers, traders, natural resource management etc.
* led by the regional/country research teams and IFPRI
* employs a variety of agronomic, systems, and other approaches, including the IFPRI survey
* Sampling frame: determined by IFPRI but with input from regional/country project research teams

*Development domain scale*:

* What is the scope for scaling out the findings of the Africa RISING program to other households in the development domain? This addresses the broader development agenda and program-wide design, including scaling and adoption
* Led by IFPRI, using the survey tool and sampling frame, but with input from the regional/country research teams, especially in relation to specific survey instrument details, and household typologies within the development domain

**Application of the survey tool**

While Randomised Control Trials are a standard way in which the impacts of a new technology can be assessed such an approach is not applicable in Africa RISING because a) the intervention households will not be selected at random but will be volunteers and b) the interventions will not be a single but multiple technologies which will vary from community to community and even from household to household.

Therefore the proposal is to apply a household survey to:

1. All the intervention households in the target communities (or a sub-sample if there are too many - but this is unlikely).
2. A random selection of non-intervention households in the target communities
3. A random selection of households in non-intervention communities, but from the same development domains.

The survey will be conducted at the start and at the end (and possibly in the middle) of the project.

Comparison of intervention households[[2]](#footnote-2) with households outside the target communities, but in the same development domaon, will estimate the effects of Africa RISING on the intervention households. Since the intervention households are not randomly selected and the non-interventions households are randomly selected, some sort of matching may be needed.

Comparison of non-intervention and non-target households will estimate the effects on non-intervention households.

The data from the non-target households can be used to document the development domain including household characteristics and farm practice so as to assess sustainable intensification trajectories for different household typologies as they occur and to inform the development of scaling out strategies. This will need to include information on composition of households, crops grown, livestock systems, farm and crop management practices, use of inputs, and key livelihood strategies employed. This is crucial data to evaluate sustainable intensification trajectories, and evolution of changes in farm practices, in the development domains of interest. This will require fine resolution data on farmer practice (for example, information on crops grown be obtained field by field rather than aggregated for the farm). The sampling strategy and survey instrument will follow the overall approach described here, and will be further fine-tuned for each country through input from the research teams.

1. The definition of ‘community’ varies between countries depending on the local administrative and geographical arrangements [↑](#footnote-ref-1)
2. Intervention households = households in the target communities to which Africa RISING interventions are directly applied.

   Non-intervention households = households in the target communities in which interventions are not applied, but which may benefit from spill-over effects of facilitated transfer.

   Non-target households = households outside the target communities but in the same development domain [↑](#footnote-ref-2)